

Photo Eye

Instructions for Model: M4-705

Connecting Wires to The Photo Eye Sensors:

- Open the cover flap on the bottom of the photo eye sensor housing to access the wire terminals.
- Insert stripped end of wires into terminal holes by pushing the wire directly into the hole. White wire in terminal #1 and stripe wire (white / black stripe) in terminal #2. See Fig. 1
- After inserting the wire in the proper terminal, pull on the wire to ensure proper connection has been made. If the wire pulls out repeat the above steps.
- To remove wiring, depress the terminal "tab" and pull wiring out. See Fig. 1 and Fig. 5.
- Place the wires in the slot from the right side of the cover.

Mounting the Photo Eye Sensors to Bracket (if required):

- Attach the sensor cap and the sensor cap fastener to the bracket. See Fig. 2A.
- Secure the photo eye sensor to the bracket with fastening wheel. See Fig. 2B.
- Repeat process for the other bracket.

NOTE: To provide maximum protection, the photo eye brackets must be mounted between 3" and 4.5" above the floor, but not exceeding 4.5". The sensors must be installed with the wire terminal pointing downward towards the garage floor. See Fig. 2A. Once sensors are wired the terminal cover flap must be securely closed.

Mounting the Photo Eye Sensor Brackets to Wall:

- Locate the mounting position for brackets (bracket can be mounted in any position as long as photo eye beam will have a clear path from one side of door to the other side after mounting).
- Use the bracket mounting holes as a template to locate an drill (2) 3/16" diameter pilot holes on both sides of the garage door 3" to 4.5" above the floor but not exceeding 4.5" as shown in figure 2B.
- Secure the bracket assemblies with 1/4" x 1-1/2" lag screws as shown in figure 2B.
- Align photo eye sensors, so they face each other.

Mounting the Photo Eye Sensors Directly to Wall (optional):

- Locate the installation position. See Fig. 3.
- Use the photo eye sensor mounting holes as a template to locate and drill for:
 - Dry wall installation with anchors
(2) 3/16" diameter pilot holes
 - Wall stud installation
(2) 1/16" diameter pilot holeson both sides of the garage door 3" to 4.5" above the floor but not exceeding 4.5" from bottom of the sensor housing as shown in figure 3.
- Secure the photo eye sensor assemblies with #6 screws and anchors (not provided) as shown in figure 3.
- Repeat process for the other photo eye sensor.

Dual Door Installation:

- In dual door installations, the transmitter (TX) and the receiver (RX) photo eye sensors (as marked on each of the photo eye components) should be mounted as indicated in Fig. 4. TX and RX marks located on the top side of the PCB, near the terminal area. See Fig. 1

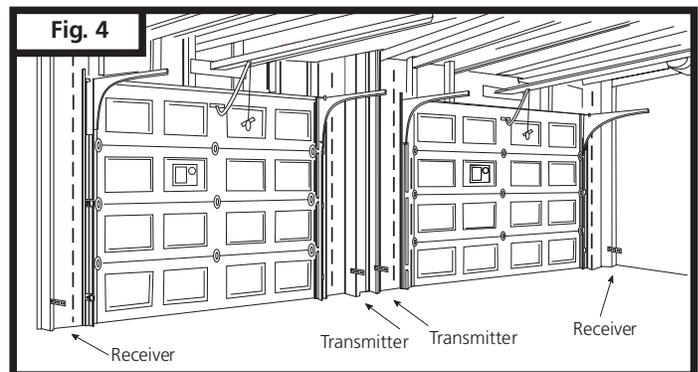
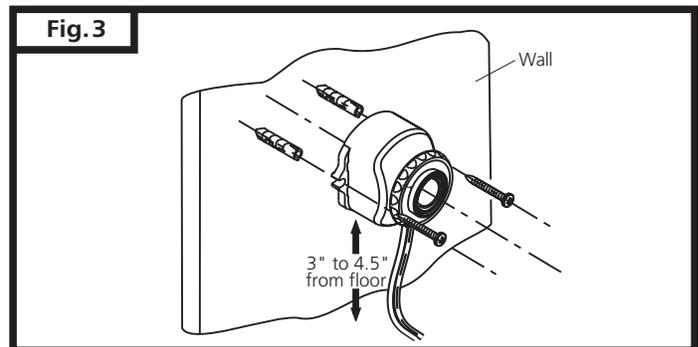
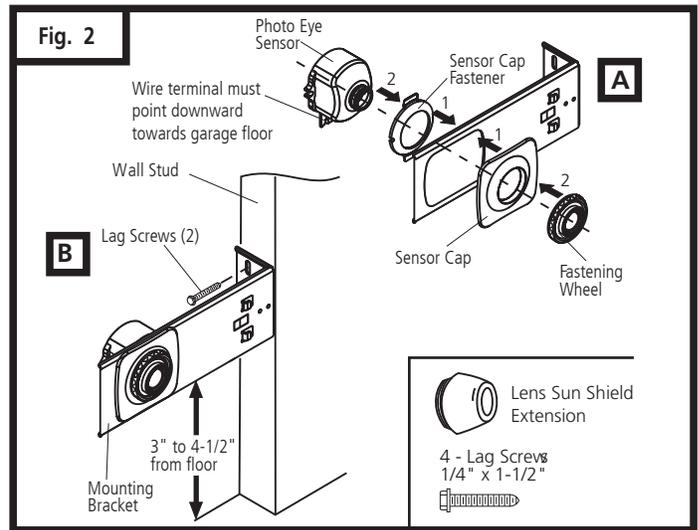
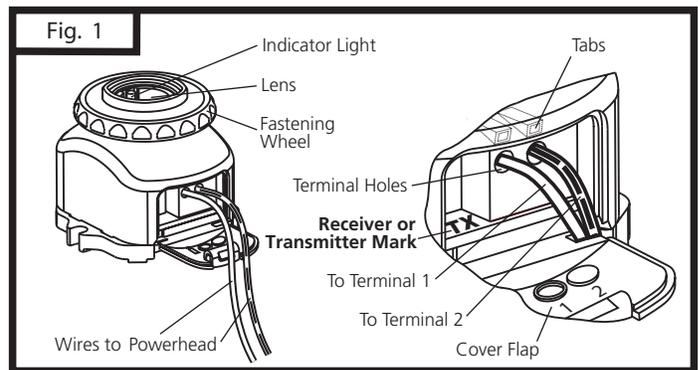


Photo Eye

Instructions (continued)

Connecting Wires to Powerhead:

- Route wiring through clip on bottom of photo eye sensor holder, then run wires along the wall and the ceiling to the powerhead. Use the staples or nail clamps provided to secure wiring to the wall, joists and/or ceiling. Do not pinch wires. Drive staples or nail clamps with enough force to hold wires in place.

Note: As an alternative, the wires can be routed along the top of the rail assembly, or along the outside of the door track. Be sure the wires are routed away from all moving parts of door and rail.

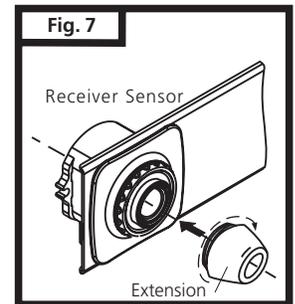
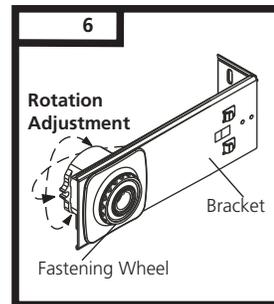
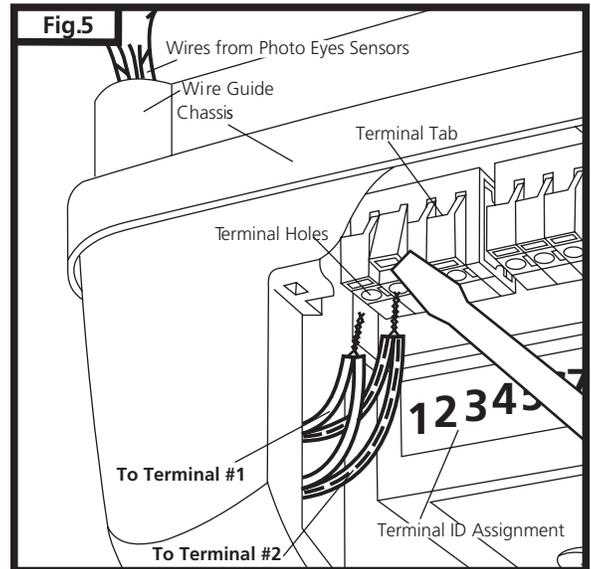
- Open the control panel cover.
- Feed wires through the wire guide from the top of chassis into the terminal area of control panel. See Fig. 5.
- Separate the double wire from each photo eye sensor into two single wires.
- Strip about 1/2" of insulation from the end of each of the four single wires.
- Combine the white wires from each photo eye sensor and twist stripped ends together tightly.
- Insert the stripped end of the white wire combination firmly into terminal #1 by pushing the wires directly into the terminal hole. If the wires are difficult to insert, a screwdriver may be used to depress the terminal "tab" while inserting the wires. To remove wires, depress the tab again and pull wires out.
- Repeat procedure for the stripe wires (white / black stripe) terminal, insert them into terminal #2.

Photo Eye Sensors Alignment Procedure - Wall Bracket Mounted System:

- Photo eye sensors maintain an invisible, unbroken beam between each other. When the photo eye sensors are connected to the power head and the power is on, the green light on the transmitter sensor will illuminate. When the sensors are aligned, the red light on the receiver sensor will illuminate.

Note: Sensor alignment must be done with the door in the closed position in order to ensure proper visibility of the sensor indicator LED. Accurate alignment will ensure a high standard of safety and performance.

- Loosen the fastening wheel on the transmitter sensor. Place the transmitter sensor at the desired location along the wall bracket horizontal adjustment area with the sensor lens parallel to the door. Secure sensor to wall bracket.
- Loosen the receiver sensor fastening wheel and find the system's optimum alignment by establishing the required horizontal adjustment and rotational adjustment as shown in figure 6, until a solid red LED light appears on the receiver sensor. Secure sensor to wall bracket.
- If necessary, fine tune the photo eye system adjustment by loosening the fastening wheel on the receiver sensor and adjust the up/down adjustment and/or rotational adjustment, until the receiver red LED shows a solid light. The optimum alignment position is in the center between the cut-off position in vertical plane (up/down) and in horizontal direction.
- Tighten the fastening wheel firmly by hand on each assembly to secure each photo eye sensor in place. If further protection against severe sun light exposure is required. Place the lens sunshied extension on the Receiver Sensor ONLY as outlined on the note below.



NOTE: Additional protection for receiver sensor against severe sun light exposure

In the event that further protection against severe sun light exposure to the receiver sensor is required. The external lens sunshied extension included with the photo eye sensors must be installed on the receiver sensor, ONLY AFTER THE SENSORS HAVE BEEN PROPERLY ALIGNED.

The external lens sunshied extension is installed on the receiver by threading the shield extension onto the receiver fastening wheel until it bottoms out with the lens outer rim as shown in figure 7. Make sure that the external shield is FIRMLY HAND TIGHTENED ONLY, TO AVOID ANY DAMAGE TO THE SENSOR.

MAKE SURE THAT ALL SYSTEM SAFETY TEST OUTLINED BY THE GARAGE DOOR OPENER MANUFACTURER ARE PERFORMED AND VERIFIED.